

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicant:** Wayne D. Frasch      **Examiner:** Amanda Marie Shaw  
**Serial No.:** 10/538,534      **Art Unit:** 1634  
**Filed:** June 10, 2005      **Docket:** 21926  
**For:** POLARIZATION-ENHANCED DETECTOR WITH GOLD NANORODS  
FOR DETECTING NANOSCALE ROTATIONAL MOTION AND  
METHOD THEREFOR

Confirmation No.: 4137

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE UNDER 37 C.F.R. §3.73(b)**

1. I hereby certify that Arizona Board of Regents, acting for and on behalf of Arizona State University is the assignee of the entire right, title and interest in the patent application identified above.

2. Wayne D. Frasch inventor of the above-identified application have transferred their right, title and interest in and to the subject matter of the above-identified application by Assignment dated December 10, 2003 to Arizona Board of Regents, acting for and on behalf of Arizona State University. The Assignment was recorded on December 10, 2004 in the United States Patent and Trademark Office under Reel 015447 and Frame 0139. Wayne D. Frasch inventor in the above-identified application have transferred their right, title and interest in and to the subject matter of the above-identified application by Assignment dated December 10, 2003 to Arizona Board of Regents, acting for and on behalf of Arizona State University. The Assignment was recorded on December 10, 2004 in the United States Patent and Trademark Office under Reel 015447 and Frame 0364.

3. The undersigned has reviewed all the documents in the chain of title of the patent applications identified above and, to the best of undersigned's knowledge and belief, Arizona Board of Regents, acting for and on behalf of Arizona State University has title in and to the above-identified application.

4. The undersigned is authorized to sign this certificate on behalf of the assignee.

February 4, 2008

Dated

  
Stephen M. Goodnick  
Associate Vice President